FEB 1 0 2006 W

	<i>§</i>	,	FORM PTO-1449		ATTY. DOCKET NO. I-2-0173.6US		SERIAL I 10/080,0	-
			DEPARTMENT OF COMMER ENT AND TRADEMARK OFFI			LICANT et al.		_
			NFORMATION DISCLOSURE STATEMENT BY APPLICANT		FILING DATE February 21, 2002		GROU! 2661	•
		(U:	se several sheets if necessary	)				
L				U.S. PATEN	T DOCUMENTS			
EXAM			DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
R	W	•	5,157,688	10/1992	Dell-Imagine			
			5,337,226	12/1994	Davis			
			5,377,225	12/1994	Davis			
		•	5,477,225	12/1995	Young et al.			
			5,648,983	07/1997	Kostic et al.			
		•	6,064,689	05/2000	Volimer et al.			
		•	2002/0126619	09/2002	De et al.			
		•	2002/0126646	09/2002	De et al.			
		•	2002/0131383	09/2002	De et al.			
		•	2002/0136160	09/2002	De et al.			***************************************
		٠	2002/0141366	10/2002	De et al.			
		٠	2002/0141372	10/2002	De et al.			
		•	2002/0141373	10/2002	De et al.			
			2002/0154599	10/2002	De et al.	-		
		•	2002/0154619	10/2002	De et al.			
			2002/0159383	10/2002	De et al.			-
	/	•	2002/0159428	10/2002	De et al.			
			OTHER DOCUMENT	'S (Including Au	ithor, Title, Date, Pertinent Page	s, Etc.)		
R	W				or and Walter Konhauser editors on Systems, Artech House, Bos			
			Minimum Mean-Square	<b>Error Equalizat</b>	Kaleh and Paul Walter Baier, "a ion for Multiuser Detection in Co ular Technology, Vol.45, No. 2, p	de-Divisio	on Multiple	Access 96.
7	/		Naja Klein, "Data Detection A IEEE 478	lgorithms Spec h Vehicular Tec	ially Designed for the Downlink chology Conference, pp. 203-20	of CDMA I	Mobile Rad	lio Systems",

EXAMINER	DATE CONSIDERED
/Robert Wilson/	06/05/2006

_				<del></del>	
			FORM PTO-1449	ATTY. DOCKET NO. I-2-0173.6US	SERIAL NO. 10/080,022
			DEPARTMENT OF COMMERCE ENT AND TRADEMARK OFFICE		ICANT et al.
			NFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE February 21, 2002	GROUP 2661
L		(U:	se several sheets if necessary)		
			OTHER DOCUMENTS (Including A	rthor, Title, Date, Pertinent Page	s, Etc.)
	RW		H.R. Karimi and N.W. Anderson, "A Nov Approximate Cholesky Factorization", <i>Pers</i> Proceedings, Vol. 3		nications PIMRC' 98, Conference
			ETSI STC SMG2 Layer 1 Expert Group, "Lo Tdoc SMG2 UM	w Cost MMSE-BLE-SD Algorithm ITS L1, Helsinki, Finland, Sept. 1	
				A (TDD) Radio Transmission and oject, Technical Specification Grow WG4, Annex B., pp. 37.	
			Lang Tong; Guanghan xu; Kailath T: "Blind a time domain approach", IEEE Trans. Inf. 1994, USA, ISSN 0	identification and equalization b Theory (USA), IEEE Transaction 018-9448, VOL-40, NR 2, pages	s on Information Theory, March
			Benvenuto N. et al. "Joint Detection With VTC 1999-Fall. IEEE VTS 50th. Vehic Communications Village. Amsterdam, S	ular Technology Conference. G	ateway to the 21st Century
			Vandaele P. et al. "Recursive Total Least S Proceedings: Vision, Image and Signal Pro	quares Algorithm for Single-User cessing, Institution of Electrical E June 2000	Blind Channel Equalisation: IEE ingineers, FB, Vol 147, No. 3, 23
			Yang et al., "Fast Joint Detection with Cy International Conference on Acoustics,	clic Reduction Exploiting Displac Speech and Signal Processing,	ement Structures", 2000 IEEE stambul, Turkey, June 2000
			Proakis et al., "Digital Signal Processing", M	acmillan Publishing Company, N 3.1, p. 890, para. 12.3.2	ew York, NY, 1992, p. 835, para.
			Vollmer et al., "Joint-Detection Using Fast International Annual Conference of ICT, 199	Fourier Transforms in TD-CDMA 19, pp. 1-7, p. 1, para. 1, p. 2, par	Based Mobile Radio Systems', a. II, p. 3, para. III, p. 4, para. IV.
\	/		Pigeonnat, "Afternative Solutions for Joint E Signal Processing Workshop on Signal Pro 32	Detection in TD/CDMA Multiple Appeasing Advances in Wireless C 29-332, p. 329, para. 2.	ccess Scheme for UMTS*, IEEE communications, May 1999, pp.
			I		

EXAMINER	DATE CONSIDERED
/Robert Wilson/	06/05/2006

	FORM PTO-1449		ATTY. DOCKET NO. 1-2-0173.6US SERIAL NO. 10/080,022  APPLICANT De et al.							
	S. DEPARTMENT OF COMMERC ATENT AND TRADEMARK OFFIC									
9.7 2003 B	STATEMENT BY APPLICANT		FILING DATE February 21, 2002							
* FRAME MAN	(Use several sheets if necessary)	·	L DOCUMENTS	L						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE					G DATE IF			
RW .	5,377,225	12/1994	NAME Davis	uass	SUBCLASS	A***	IUPPIIATE			
	5,337,226	12/1994	Davis			<del>                                     </del>				
<del>\</del> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5,648,983	07/1997	Kostic et al.							
			<del> </del>							
			·				<u></u>			
	F	OREIGN PATE	ENT DOCUMENTS		CLASS SUBCLASS FRUNC APPRO					
						TRAN	SLATION			
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO			
<del></del>										
	OTHER DOCUMENTS	S (Including Au	nthor, Title, Date, Pertinent Page	s, Etc.)						
RW			ir and Walter Konhauser editors, on Systems, Artech House, Bost							
	Minimum Mean-Square	Error Equalizat	Kaleh and Paul Walter Baier, "Z ion for Multiuser Detection in Co ular Technology, Vol.45, No. 2, p	de-Divisio	n Multiple		ss			
$\sqrt{}$			ially Designed for the Downlink on the Country Conference, pp. 203-20			dio Sy	stems",			

EXAMINER	DATE CONSIDERED
/Robert Wilson/	06/05/2006

(	DEC J. T. E		Sheet 2 of 2								
<b>\</b>	AM PTO-1449	ATTY. DOCKET NO. I-2-0173.6US	SERIAL NO. 10/080,022								
	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	1	ICANT et al.								
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE February 21, 2002	GROUP 2667								
	(Use several sheets if necessary)										
	OTHER DOCUMENTS (Including A	Author, Title, Date, Pertinent Pages	s, Etc.)								
RW	H.R. Karimi and N.W. Anderson, "A No Approximate Cholesky Factorization", Pers Proceedings, Vol. 3		nications PIMRC' 98, Conference								
	ETSI STC SMG2 Layer 1 Expert Group, "Lo Tdoc SMG2 U	ow Cost MMSE-BLE-SD Algorithm MTS L1, Helsinki, Finland, Sept. 1									
		A (TDD) Radio Transmission and Project, Technical Specification Gro N WG4, Annex B., pp. 37.									
	Lang Tong; Guanghan xu; Kailath T: "Blin a time domain approach", IEEE Trans. Inf 1994, USA, ISSN (		s on Information Theory, March								
	Benvenuto N. et al. "Joint Detection With VTC 1999-Fall. IEEE VTS 50th. Vehi Communications Village. Amsterdam, \$	icular Technology Conference. Ga	ateway to the 21st Century								
	Vandaele P. et al. "Recursive Total Least S Proceedings: Vision, Image and Signal Pro	Vandaele P. et al. "Recursive Total Least Squares Algorithm for Single-User Blind Channel Equalisation: If Proceedings: Vision, Image and Signal Processing, Institution of Electrical Engineers, FB, Vol 147, No. 3, 2 June 2000									
		Yang et al., "Fast Joint Detection with Cyclic Reduction Exploiting Displacement Structures", 2000 International Conference on Acoustics, Speech and Signal Processing, Istambul, Turkey, June 2									
		is et al., "Digital Signal Processing", Macmillan Publishing Company, New York, NY, 1992, p. 835, para 11.3.1, p. 890, para. 12.3.2									
		Vollmer et al., "Joint-Detection Using Fast Fourier Transforms in TD-CDMA Based Mobile Radio Systems", International Annual Conference of ICT, 1999, pp. 1-7, p. 1, para. 1, p. 2, para. II, p. 3, para. III, p. 4, para. IV									
	Signal Processing Workshop on Signal Processing	s for Joint Detection in TD/CDMA Multiple Access Scheme for UMTS", IEEE n Signal Processing Advances in Wireless Communications, May 1999, pp. 329-332, p. 329, para. 2.									

EXAMINER	DATE CONSIDERED
/Robert Wilson/	06/05/2006

Sheet \_1\_ of \_1 ATTY. DOCKET NO. SERIAL NO. **FORM PTO-1449** 10/080,022 I-2-0173.6US TO MADE U.S. DEPARTMENT OF COMMERCE **APPLICANT** PATENT AND TRADEMARK OFFICE De et al. INFORMATION DISCLOSURE **GROUP** FILING DATE STATEMENT BY APPLICANT 2661 2/21/2002 (Use several sheets if necessary) U.S. PATENT DOCUMENTS FILING DATE IF EXAMINE SUBCLASS DATE DOCUMENT NUMBER RINITIAL FOREIGN PATENT DOCUMENTS Technology Qenter 2000 TRANSLATION CLASS SUBCLASS YES COUNTRY NO DOCUMENT NUMBER DATE OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Weidong Yang et al., "Fast Joint Detection with Cyclic Reduction Exploiting AG Displacement Structures", 2000 IEEE International Conference on Acoustics, RW Speech, and Signal Processing, Istanbul, Turkey, 5-9 June. Proceedings (Cat. No. 00CH37100), Proakis John G., "Digital Signal Processing, Macmillan Publishing Company, New АН York, NY, 1992, pg. 835, para. 11.3.1, page 890, para. 12.3.2 Vollmer et al., "Joint-Detection Using Fast Fourier Transforms in TD-CDMA based ΑI Mobile Radio Systems", International Annual Conference of ICT, 1999, pages 1-7, page 1, para. I, page 2, para. II, page 3, para III, page 4, para IV. Pigeonnat Y., "Alternative Solutions for Joint Detection in TD/CDMA Multiple ΑJ Access Scheme for UMTS", IEEE Signal Processing Workshop on Signal Processing Advances in Wireless Communications, May 9, 1999, pages 329-332, page 329, para. 2.

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**EXAMINER** 

/Robert Wilson/

DATE CONSIDERED

06/05/2006

PEID	19																	
9.70				_								Sheet _	<u>1</u> of	1_				
AND TO	STATE		FORM PTO-1449  S. DEPARTMENT OF COMMERCE								ATTY. DOCKET NO. SERIAL NO. 1-2-0173.6US 10/080,022							
		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE									APPLICANT  De et al.							
		INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)								-	FILING DATE GROUP 2/21/2002 2661							
								U	ı.S.	PATENT	DOCUMENTS							
٠	EXAMINER INITIAL			DC	DCUM	IENT I	NUMB	ER		DATE	NAME	CLASS	SUBCLASS	JBCLASS FILING DA				
	$\leq$																	
				$\Rightarrow$					_			RE	CEIV	ED				
				$\dashv$	_	//						-AUG	122	102				
				-	$\dashv$			_				Technok	gy Gent	<del>er 26</del>	<del>00</del>			
				$\dashv$				$\vdash$	$\vdash$									
			Н	7	_													
										_		<u></u>			<u>&gt;</u>			
	FOREIGN PATENT DOCUMENTS																	
				D	OCUN	AENT :	NUME	BER		DATE	COUNTRY	CLASS	SUBCLASS	YES	NO			
	-		H					L										
		OTHER	D	oc	UN	1EN	ITS	S (Ir	nclu	ding Aut	thor, Title, Date, Per	tinent P	ages, l	Etc.)				
	RW	AG		Hy	brid	TD rend	)-C[ :e.	OMA Gat	4 Sy tew	stems" VT ay to the 2	etection With Low Comp C 1999-Fall. IEEE VTS E 1st Century Communica EEE Vehicular Technolog	i0th. Vel tions Vill	nicular T age. Ar	echn nster	ology			
	$\frac{1}{}$	АН		Va	Cha	nne	l Ec	gual	isati	ion: IEE Pr	Total Least Squares Algo oceedings: Vision, Imag ngineers, FB, Vol 147, N	e and Sig	gnal Prod	cessir	Blind ng,			
	FΧΔ	MINER									DATE (	CONSIDE	RED					

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

06/05/2006

/Robert Wilson/

**EXAMINER** 

									Sheet	of	_1_	
<u> </u>	U.S. DE	-	ORM P			лм	RCF	ATTY. DOCKET NO. I-2-0173.6US	i i	SERIAL 10/080,		
2002	PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE  STATEMENT BY APPLICANT							APPLICANT De et al.				ECE
DEMIRES	STA	TE	MENT	BY A		AN'	Т	FILING DATE 2/21/2002	N	GROU ot Yet K	IP	
	-				,	J.S	. PATENT	DOCUMENTS	•		Tech	nology
EXAMINE	1		DOCU	MENT	NUMBER		DATE	NAME	CLASS	SUBCLASS		DATE IF
FOREIGN PATENT DOCUMENTS												
			DOCU	MENT	NUMBER		DATE	COUNTRY	CLASS	SUBCLASS	TRANS	SLATION
	 	Ļ,		=						<u> </u>	YES	МО
									<del> </del>	<u> </u>		
OTHER DOCUMENTS (Including Auth				hor, Title, Date, Pert	inent P	ages,	Etc.)					
RW	AA		Ran					r and Walter Konhauser editors, <i>Third Generation</i> on Systems, Artech House, Boston, 2000.				
	АВ		Minim	num	Mean	Squ	are Error Ed annels", <i>IEI</i>	Kaleh and Paul Walter B qualization for Multiuser EE Trans. on Vehicular To . 276-287, May 1996.	Detection	n in Cod	e-Div	ision
	AC						o Systems"	algorithms Specially Designation of the Algorithms Specially Designation of the Algorithms (1997). The Algorithms (1997) and the Algorithms (1997) a				
AD H.R. Karimi and N.W. Anderso Joint-Detection using Approxim Mobile Communications PIMRO								on, "A Novel and Efficien	t Solutio	n to Blo	ck-Ba	esed
	AD		Joint-	-Det	tection		tions PIMR		edings, \	rsonal, li	n <b>do</b> or	and
	AE		Joint- Mobil	-Det ile C	tection Commu	nica —— 2 La	1345, ayer 1 Expe	C' 98, Conference Proce	edings, \ \. 1SE-BLE-	rsonal, li Vol. 3, p SD Algo	ndoor pp. 13 prithm	and 340-

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

/Robert Wilson/

**EXAMINER** 

DATE CONSIDERED 06/05/2006